CLAIMS

1. A printed wiring board unit, wherein:

a first component is mounted on a printed wiring board;

an auxiliary substrate for hierarchical mounting is mounted next to the mounted first component on the printed wiring board;

a second component larger in size than the first component is mounted above the first component, the second component being supported on the auxiliary substrate for hierarchical mounting with terminals of the second component being connected thereto; and

the auxiliary substrate for hierarchical mounting has component pads on an upper surface thereof and printed wiring board pads on a lower surface thereof, the component pads being connected to the terminals of the second component, the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the printed wiring board pads being more dispersed than the component pads.

2. A printed wiring board unit, wherein:

a first component is mounted on a printed wiring board;

an auxiliary substrate for hierarchical mounting is mounted next to the mounted first component on the printed wiring board;

a second component larger in size than the first component is mounted above the first component, the second component being supported on the auxiliary substrate for hierarchical mounting with terminals of the second component being connected thereto;

the second component has a plurality of ground terminals; and

the auxiliary substrate for hierarchical mounting has a ground layer inside thereof, component pads on an upper surface thereof, and printed wiring board pads on a lower surface thereof, the component pads being connected to the terminals of the second component, the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the component pads including component ground pads connected to the ground terminals of the second component and to the ground layer connected to a ground pad for the printed wiring board, the printed wiring board pads being more dispersed than the component pads.

3. A printed wiring board unit, wherein:

a first component is mounted on a printed wiring board;

an auxiliary substrate for hierarchical mounting is mounted next to the mounted first component on the printed wiring board;

a second component larger in size than the first component is mounted above the first component, the second component being supported on the auxiliary substrate for hierarchical mounting with terminals of the second component being connected thereto;

the second component has a plurality of power supply terminals of equal potentials; and

the auxiliary substrate for hierarchical mounting has a power supply layer inside thereof, component pads on an upper surface thereof, and printed wiring board pads on a lower surface thereof, the component pads being connected to the terminals

of the second component, the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the component pads including component power supply pads connected to the power supply terminals of the second component and to the power supply layer connected to a power supply pad for the printed wiring board, the printed wiring board pads being more dispersed than the component pads.

4. A printed wiring board unit, wherein:

a first component is mounted on a printed wiring board;

an auxiliary substrate for hierarchical mounting is mounted next to the mounted first component on the printed wiring board;

a second component larger in size than the first component is mounted above the first component, the second component being supported on the auxiliary substrate for hierarchical mounting with terminals of the second component being connected thereto;

the second component has a plurality of ground terminals and a plurality of power supply terminals of equal potentials; and

the auxiliary substrate for hierarchical mounting has a ground layer and a power supply layer inside thereof, component pads on an upper surface thereof, and printed wiring board pads on a lower surface thereof, the component pads being connected to the terminals of the second component, the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the component pads including component ground pads connected to the ground terminals of the

second component and to the ground layer connected to a ground pad for the printed wiring board, the component pads including component power supply pads connected to the power supply terminals of the second component and to the power supply layer connected to a power supply pad for the printed wiring board, the printed wiring board pads being more dispersed than the component pads.

5. The printed wiring board unit as claimed in claim 1, wherein a chip component is mounted on the upper surface of the auxiliary substrate for hierarchical mounting.

6. A printed wiring board unit, wherein:

a first component is mounted on a printed wiring board;

a first auxiliary substrate for hierarchical mounting is mounted next to the mounted first component on the printed wiring board;

an auxiliary printed wiring board is connected to and supported on the first auxiliary substrate for hierarchical mounting at a position above the first component;

a second component is mounted on the auxiliary printed wiring board;

a second auxiliary substrate for hierarchical mounting is mounted next to the mounted second component on the auxiliary printed wiring board;

a third component larger in size than the second component is mounted above the second component, the third component being supported on the second auxiliary substrate for hierarchical mounting with terminals of the third component being connected thereto;

the second auxiliary substrate for

hierarchical mounting has component pads on an upper surface thereof, the component pads being connected to terminals of the second component;

the first auxiliary substrate for hierarchical mounting has printed wiring board pads on a lower surface thereof, the printed wiring board pads being connected to pads on the printed wiring board;

the component pads and the printed wiring board pads are electrically connected; and

the printed wiring board pads are more dispersed than the component pads.

7. An auxiliary substrate for hierarchical mounting mounted next to a first component mounted on a printed board, the auxiliary substrate for hierarchical mounting comprising:

component pads on an upper surface thereof and printed wiring board pads on a lower surface thereof, the component pads being connected to terminals of a second component larger in size than the first component, the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the printed wiring board pads being more dispersed than the component pads.

8. An auxiliary substrate for hierarchical mounting mounted next to a first component mounted on a printed board, the auxiliary substrate for hierarchical mounting comprising:

a ground layer inside thereof, component pads on an upper surface thereof, and printed wiring board pads on a lower surface thereof, the component pads being connected to terminals of a second component larger in size than the first component,

the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the component pads including component ground pads connected to a plurality of ground terminals of the component and to the ground layer connected to a ground pad for the printed wiring board, the printed wiring board pads being more dispersed than the component pads.

9. An auxiliary substrate for hierarchical mounting mounted next to a first component mounted on a printed board, the auxiliary substrate for hierarchical mounting comprising:

a power supply layer inside thereof, component pads on an upper surface thereof, and printed wiring board pads on a lower surface thereof, the component pads being connected to terminals of a second component larger in size than the first component, the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the component pads including component power supply pads connected to a plurality of power supply terminals of the component and to the power supply layer connected to a power supply pad for the printed wiring board, the power supply terminals being of equal potentials, the printed wiring board pads being more dispersed than the component pads.

10. An auxiliary substrate for hierarchical mounting mounted next to a first component mounted on a printed board, the auxiliary substrate for hierarchical mounting comprising:

a ground layer and a power supply layer inside thereof, component pads on an upper surface

thereof, and printed wiring board pads on a lower surface thereof, the component pads being connected to terminals of a second component larger in size than the first component, the printed wiring board pads being connected to pads on the printed wiring board, the component pads and the printed wiring board pads being electrically connected, the component pads including component ground pads connected to a plurality of ground terminals of the component and to the ground layer connected to a ground pad for the printed wiring board, the component pads including component power supply pads connected to a plurality of power supply terminals of the component and to the power supply layer connected to a power supply pad for the printed wiring board, the power supply terminals being of equal potentials, the printed wiring board pads being more dispersed than the component pads.

11. The auxiliary substrate for hierarchical mounting as claimed in claim 7, characterized by having a frame-like shape, a U-shape, or a shape of two separated sticks.

12. An electronic apparatus having the printed wiring board unit claimed in claim 1 loaded inside thereof.